

Policy for Highway Winter Service

Report of the Executive Director of Environment, Economy and Culture

Please note that the following recommendations are subject to consideration and determination by the Cabinet (and confirmation under the provisions of the Council's Constitution) before taking effect.

Recommendation: It is recommended that:

- (a) the amendments to Winter Service policy as set out in Section 3 of this report and the revised policy statement in Appendix I be approved for the 2010/11 Winter;**
- (b) authority to change any operational procedures is delegated to the Executive Director of Environment, Economy and Culture, or his nominated deputy, in consultation with the Cabinet Member for Highways and Transportation;**
- (c) the progress in addressing the recommendations of the EEC Scrutiny Winter Task Group be noted.**

1. Summary

This report outlines the measures that have been taken to improve Winter service following the last two years' severe weather, and recommends policy changes for adoption for this coming Winter to enhance the service whilst remaining as far as it is practicable within set budgets. It also responds to the Environment, Economy and Culture Scrutiny Winter Highway Maintenance Task Group recommendations made in relation to Winter service, and recommendations from the Children and Young Peoples' Services Scrutiny School Transport Task Group, as requested by Cabinet on 14 July 2010 (Minute 227).

2. Background/Introduction

Over the past two years Devon has experienced exceptionally severe Winters, the 2008/09 Winter being reported as the worst in 18 years whilst the 2009/10 was said to be the worst for 30 years, which has generated considerable interest from residents, the business community and the media. There has been a great deal of pressure to include additional roads to the precautionary salting network even where those roads do not meet current policy criteria. The current Winter service policy is quite robust but clearly can be improved upon.

During both Winters, despite a national shortage of salt and some authorities being dependent on mutual aid from other authorities, Devon County Council did not run out of salt. Proactive management decisions had to be taken to reduce salt usage because of the national salt shortage. Whilst some residents and businesses were undoubtedly inconvenienced for a period during both Winters, over 80% of Devon's population had uninterrupted access to the salted highway network. Salt usage in 2009/10 was 30,000 tonnes nearly six times that used three Winters earlier.

It is recognised nationally that Devon County Council provides a very good Winter service response during normal Winter conditions (eg National Highways and Transportation Survey) and that the response to the severe weather was generally considered to be acceptable or good.

Devon County Council's own annual survey has indicated that net satisfaction has dropped from 60% in 2005 to 13% in 2010 whilst the importance accorded to winter maintenance has risen from 22% in 2005 to 31%, which is consistent with the trend from milder to harsher Winters. The reduction in satisfaction and the increase in importance reflect the impact on the resident population and the demand for high quality services.

It is therefore appropriate that the Winter service response is critically reviewed and recommendations made. The Winter service plan is reviewed annually and changes to the road network are reflected in the roads that are included in the precautionary salting network. The service has some flexibility to respond to changing circumstances and situations. The comprehensive review by the Environment, Economy and Culture Task Group, where both internal and external witnesses gave evidence, has been most welcome in providing further recommendations. Nationally there was a review commissioned by the UK Roads Liaison Board on the severe weather of February 2009 and this year the Department for Transport commissioned a further review from which an interim report was issued on 26 July 2010. Both of these have been considered in forming the recommendations in this report.

The Winter service plan makes provision for the treatment of roads in Devon through:

- (i) The precautionary salting network – roads normally treated proactively prior to freezing temperatures in order to prevent frost or ice forming.
- (ii) The secondary salting network – additional roads that are treated during extended periods of cold weather or snow.
- (iii) The resilience salting network – a reduced precautionary salting network to be employed where there are salt shortages or other resource problems.

3. Winter Policy Proposal

The Winter service policy, for approval by Cabinet, is shown at Appendix I. It is proposed that authority to change any operational procedures is delegated to the Executive Director of Environment, Economy and Culture, or his nominated deputy in consultation with the Cabinet Member for Highways and Transportation.

The key policy changes for Winter service are:

3.1 Criteria of the precautionary (primary) salting network (Appendix I. Section 2.2)

The precautionary salting network are those roads that will be treated when ice, frost or snow is forecast. The target time for treating the precautionary salting network is two and half hours from start of the treatment. The criteria used hitherto to determine the precautionary salting network are:

- Strategic Routes - All A and B roads and C roads classified as high speed routes (national speed limit applies).
- Traffic Flow - Routes with February two way flows greater than 1,000 vehicles per day.
- Settlement Population - Main access route to settlements with a population of 500 or greater.
- Emergency Premises - Main access route to 24hr emergency services premises, defined as "Emergency premises with 24 hour access" include: ambulance stations, full time and retained fire stations, hospitals with 24 hour casualty departments and police stations manned 24 hours.
- Bus Routes – Urban bus routes with a regular service frequency of at least 15 minutes.

- Adjoining Highway Authority Salting Networks – Agreement to ensure consistency of action across boundaries.

As a result of the reviews from last Winter it is proposed that the following criteria are approved for addition:

- The bus loop of Park & Ride sites.
- Cottage and Community Hospitals – Main highway access route to strategic cottage and community hospitals as notified to the authority by Devon Primary Care Trust (or other successor body/bodies).
- Secondary Schools – Main highway access to secondary schools.
- Bus Routes – Bus routes with a service interval of at least 15 minutes within any one hour of the day, in one direction of travel or where a combination of multiple bus services meet this criteria.

This has the effect of extending the precautionary salting network by 19 km to a total of 2,742 km, which equates to 21.4% of Devon's total highway network. This will provide reasonable access for 86% of Devon's resident population to the treated network, which carries approximately 70% of the traffic on Devon's roads.

3.2 Criteria for the secondary salting network (Appendix I. Section 2.5)

The secondary salting network is defined as part of the highway network that will usually be treated during extended periods of cold weather (defined as snow or ice for most of the day).

The current criteria are:

Roads providing access to other settlements (usually one road linking to the salting network), roads off the precautionary salting routes and busy cycleways and footways are treated on a reactive basis.

It is proposed that the following criteria are approved for addition:

- Settlement Population - Main access route to settlements with a population of 100 to 499.
- Park and ride sites (car parking area).
- Bus Routes – Where problems have been identified on routes with a service interval of at least 30 minutes within any one hour of the day, in one direction of travel, or where a combination of multiple bus services meet this criteria.
- Main highway access route to Devon County Council Level 1 properties (those council properties providing essential services which cannot be closed in severe weather - as defined in during the swine flu pandemic emergency response).

From the population data that has been supplied by Strategic Intelligence, these criteria will allow reasonable access to the treated network for an additional 10% of Devon's resident population, over that provided for by the primary network.

3.3 Resilience Network (Appendix I. Section 2.7)

The UK Road Liaison Group recommended that, following the salt shortage during the Winter of 2009/10 (or other resource problem), authorities should develop a 'resilience' network. This network would be a reduced salting network considered to be the absolute minimum that should be treated in order to keep the county moving.

In order to maintain the integrity of the resilience network, the UK Road Liaison Group determined that authorities should be able to treat at a rate of 20g/m² six times a day for a period of 6 days.

This will require a minimum stock holding of 6,500 tonnes during December, January and February (the high risk period). During the lower risk months of November and March the stock holding would be a minimum of 5,000 tonnes.

Criteria for the resilience networks are:

- A roads
- Main access to 24hr emergency premises
- Main access to primary market and coastal towns

This would result in approximately 50% of the precautionary salting network continuing to be treated on a proactive basis throughout an extended period of ice and snow.

This resilience network will only be implemented when authorised by the Executive Director of Environment, Economy and Culture in consultation with the Cabinet Member for Highways and Transportation, and it will be instigated on a countywide basis only.

3.4 Self help

One of the main challenges identified last Winter was how individuals and communities can provide self-help. Clearly, the resources available to DCC are limited and during periods of extreme weather these resources are very quickly stretched to a point where additional support to the community can only be from the community itself.

Comments were received that people did not know what they could do to help themselves or what they should not do, to avoid litigation. People did not appear to understand the purpose of grit bins or the fact that they could, and should only, spread salt from the bins on the highway. An inventory of the current grit bins has been compiled which is currently estimated at in excess of 2,900. Grit bins are expensive to maintain and refill, costing over £160,000 to service and fill all the bins prior to Winter, and therefore there must be careful consideration of their benefits and adherence to the policy. The policy for location of grit bins has been clarified, includes the requirement to install labels on the bins and also provides a Member with a route to request a bin, which is proposed as below: (Appendix I. Section 5.15).

Grit bins are an expensive facility to manage and maintain, but provide a useful means of self-help with the community. It is important that the use and value of existing grit bins in an area is reviewed before additional bins are considered. Grit bins will be sited off the precautionary salting network at known trouble spots for formation of ice on the highway, usually in urban areas, but also in some rural locations where particularly difficult conditions exist, subject to financial restraints. Grit bins will only be considered for location on the precautionary salting network at railway level crossings (grit only) or at known trouble-spots on urban footways. Grit bins should only be located where they do not present an unreasonable hazard to other highway users and can be safely accessed. Requests for new grit bins will be made to the Area office who may consult local members.

Members may request the addition of a grit bin where there is a pressing community justification that may not strictly meet the above requirement, in consultation with the Area Engineer, and using their own locality budget.

Grit Bins should contain a 50/50 mixture of salt and grit except at railway crossing where 100% grit must be used.

Grit bins will only be used within National Parks when that Park Authority has given express permission.

Grit bins will be uniquely identified with a label that provides advice on how the grit bins should be used and managed.

Grit bins will be inspected and filled if required, prior to the onset of Winter. Bins will be refilled during periods of prolonged freezing when they are known to have been used. As it is not cost effective to refill an individual bin in an area, bins will only normally be refilled when a number in a locality require replenishment. Where grit bins have been abused or vandalised, consideration will be given to removal or relocation.

There are two areas where self-help can be encouraged. Firstly, in the community and in particular parishes, through the Parish Councils, and secondly by individuals.

In order to try and overcome some of these issues, a number of initiatives have been proposed.

- (a) Publish a self help leaflet to explain what people can do to help themselves and provide information on the grit bins.
- (b) Encourage Parish Councils to take responsibility for treating local roads off defined networks during periods of extreme weather by appointing a snow warden.
- (c) Enable Parish Councils and other public service premises to procure bags of salt through Supply Zone.
- (d) Determine how farmers may be able to support their local communities in extreme weather.
- (e) Hold a conference for stakeholders (particularly Parish and Town Councils) to share learning and best practice.

Each of these proposals has merit, and the proposed responses are detailed below.

- (a) A self-help leaflet is being drafted following advice from the legal and insurance teams. It is also a recommendation of the DfT's Interim Report 'The Resilience of England's Transport Systems in Winter' that the government publish a self help leaflet for distribution to every household. A sign is being developed that will be attached to the grit bins to provide a unique identifier and advise how the grit bin should be used. A more effective method of reporting and managing the refilling of bins economically through the inventory system is also being developed. It is not cost effective to refill an individual bin in an area therefore it is proposed that bins will only normally be refilled when a number in the area require replenishment.
- (b) It is proposed that Parish and Town Councils, as part of their resilience planning, be encouraged to appoint "Snow Wardens". Depending on the take-up of this approach, the County Council would commit to train and support the Snow Wardens, and agree the scope of what footways or highway may be treated. The Parish Councils would then be responsible for managing local resources within the parish. They could also become focal points for exchanging information in snow events with the county on the state of the highway and perhaps co-ordinate social needs within the parish during an event. Anyone working on the highway under the direction of a trained Snow Warden would be covered by the County Council's indemnity insurance.

Given the number of parishes and uncertainty of uptake it may be necessary to phase the implementation over the next 12 months and undertake pilots this Winter.

- (c) In order that the Parish Councils are able to respond at locations for which they may wish to take responsibility in extreme weather situations, sufficient provisions of salt should be made available to communities to procure prior to the Winter period to meet their anticipated needs. Negotiations have been undertaken with Devon County Council's SupplyZone to have significant quantities of salt available in suitable packaging (25 kg bags), that is easy to handle and store, to public sector organisations at the cheapest practical cost. The largest element of the cost in providing bagged salt is in the packaging and transportation.
- (d) Discussion have started with the local National Farmers' Union representatives on what capability farmers currently have with their equipment and how pilot studies are progressing in other authorities.
- (e) An Extreme Events conference is being organised by the authority on 28 September 2010 at the Met Office, with the support of professional partners to discuss with stakeholders how Devon manages severe weather events and its Winter service and the role all stakeholders can play in the response, including building their own organisation's resilience to these events.

3.5 Provision of salt as mutual aid to other authorities (Appendix I. Section 5.16)

It is proposed that the following policy is adopted for exercising mutual aid in pursuance of the Scrutiny Task Group's recommendation:

Devon County Council will normally only consider providing salt under mutual aid arrangements to other authorities when its own Winter service provision is not disproportionately affected and when the requesting authority:

- Has a network that directly links with Devon's own network
- Or it is not to Devon's ultimate detriment (eg exchanging salt shipments)
- Or where the requesting authority has made suitable contingency and salt reduction arrangements but the weather has been so exceptional to overwhelm these arrangements.

4. Winter Task Group Reviews

The EEC Scrutiny Committee Winter Task Group and the CYPS Scrutiny Committee School Transport Task Group made a number of recommendations concerning Winter. The progress made against these recommendations is shown at Appendix II.

5. Financial Considerations

The proposals for Winter Service in Section 3 have been made on the basis that the Winter budget for the 2010/11 Winter has already been determined, and can be contained for a normal mild Winter (about 70 primary treatments of all or part of the county), with the exception of the costs identified below for the provision and management of additional grit bins and labels. The increase in the primary network is less than 1% addition to the salting network. The changes to the secondary network should not increase its overall length but provide clearer criteria to target the most populated areas and hence create a more consistent response across the county, based on population.

The addition of further grit bins to the current inventory will have revenue budget implications for their ongoing management and maintenance. It is currently estimated to cost £60 to service and fill an empty grit bin prior to Winter (when done as part of the Winter preparation process) which equates to about £160,000 for 2,900 bins. It costs £100 to refill a bin during the Winter on an individual basis, which if all bins required refilling on one occasion would equate to £270,000. It is hoped that following discussions with the contractor, more efficient methods can be employed to reduce these costs, but maintaining bins will always be expensive.

The provision of additional grit bins, if they meet the policy criteria, will increase the revenue commitment to maintain and replenish them, even if through negotiations with the contractor cheaper ways are found to achieve this. The provision of signs on all grit bins will have a cost estimated at £27,000 for the signs plus an estimated £60,000 for their installation, based on 2,900 bins. The installation costs will be reduced if combined with the pre-winter maintenance and filling of the bins.

Options to improve the efficiency of the current service are being explored over the coming year and these include the filling of the grit bins and optimising routes.

6. Sustainability Considerations

As salt is damaging to the environment but an accepted effective de-icer, the authority has used best practice to minimise the use of salt whilst seeking to treat the network effectively. This has been achieved through the extensive use of pre-wet salt, using weather forecast technology and using the Highways Operations Control Centre to minimise the need for unnecessary treatment whilst being able to respond quickly to changing weather conditions.

In addition the provision of salt to third parties through SupplyZone has considered the need for supply to be in a form that is easily handled and stored, hence the use of 25kg bags rather than open salt stock.

Winter service is also essential to the economy in Winter, in keeping transport moving, and whilst short term disruption to transport due the weather can often be recovered, any prolonged reduction in treatment would have an impact on the economy.

7. Carbon Impact Considerations

Salt supplies are predominantly being delivered to Devon by ship from Northern Ireland which minimises the road haulage requirement and reduces the carbon impact. Salting route efficiencies are also monitored and will be a consideration when routes are optimised.

8. Equality Considerations

The policy proposals have been made on the basis of objective criteria that will benefit the maximum population of the county within available resources and addresses some issues that were learnt from the last Winter, such as access to secondary schools and smaller hospitals.

9. Legal Considerations

The lawful implications of the proposals have been considered and taken into account in the preparation of the formulation of the recommendations set out above.

There has been general concern about the legal liabilities regarding self-help. Whilst in some countries there is a legal responsibility for property owners to clear the footway outside their property, currently in this country there is not. The need to encourage self-help has been recognised by the Department for Transport's Winter Resilience Review in their interim recommendation 15 which states that a code setting out good practice for members of the public, including business owners, should be developed, by the Government, in clearing snow and ice from footways for this coming Winter. The legal advice is that whilst the possibility of litigation can never be eliminated, those undertaking self help should not fear litigation providing that they do not act negligently, for example by using water to melt snow that would re-freeze, and clear guidance, as recommended, would assist in this area. The legal liability of individuals may be covered by their own existing household insurance, and anyone who is designated and trained by the Authority (eg Snow Wardens) will be covered by its indemnity policy. Additionally most Parish Councils are likely to have their own public liability insurance already.

10. Risk Management Considerations

Winter service features high on the County Council's risk register because of the significant risk to the authority in terms of litigation when accidents occur, and the authority has had a good record in defending its exposure to significant winter claims but the risk remains.

11. Options/Alternatives

The current policy has been affordable and robust but the reviews of recent events have highlighted that some small changes could be made that provide a better service within the current funding arrangements.

An enhanced level of service can always be provided, to address some of the aspirations of the Scrutiny Task Group Recommendations (for example to treat more bus routes) but these would require an increase in the financial commitment to support them. Similarly, the Committee could agree to the free provision of salt to Parish Councils, but as the main cost is in packaging and supply rather than the salt, it would be an estimated £60,000 to supply every parish in Devon with a tonne of salt.

12. Reason for Recommendation/Conclusion

Due to the lead times in preparing and implementing winter policy a significant amount of work has already been undertaken to prepare for the coming winter, and some initiatives will take longer to fully implement. These proposals have therefore been based on what is achievable for the coming winter, and will also provide some improvements from the lessons learnt in the last two years, both locally and nationally, to put the county in the best position for managing the coming Winter.

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Electoral Divisions: All

Cabinet Member for Highways and Transportation,
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Local Government Act 1972: List of Background Papers

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Background Paper	Date	File Ref
1. EEC Scrutiny Committee Winter Task Group Report	8 th June 2010	CX/10/60
2. CYPS Scrutiny Committee School Transport Task Group Report	16 th June 2010	CX/10/56
3. UK Roads Liaison Group: Lessons from the Severe Weather February 2009	July 2009	http://www.ukroadsliaisongroup.org/liaison/winter.htm
4. UK Roads Liaison Group: Well-maintained Highways section 13	7 th May 2010	http://www.ukroadsliaisongroup.org/pdfs/Well%20maintained%20highways%20January%202010.pdf
5. DfT: The Resilience of England's Transport Systems in Winter – Interim Report	26 th July 2010	DfT
6. NHT Network Public Satisfaction Survey	2009	http://www.nhtsurvey.org/
7. DCC Winter Service Plan 2009/2010	August 2009	Highway Management

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